查询800EXH22供应商

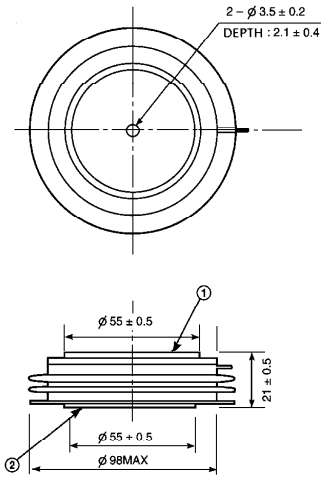
TOSHIBA FAST RECOVERY DIODE SILICON DIFFUSED TYPE

800EXH22

HIGH SPEED RECTIFIER APPLICATIONS

Unit in mm

- Repetitive Peak Reverse Voltage : V_{RRM} = 2500V
- Average Forward Current : $I_{F(AV)}$ = 800A
- Reverse Recovery Time : t_{rr} = 5μs (MAX.) (T_j = 25°C)



1. CATHODE
2. ANODE

JEDEC	—
EIAJ	—
TOSHIBA	3-98B1A

Weight : 630g

MAXIMUM RATINGS

CHARACTERISTIC	SYMBOL	RATING	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}	2500	V
Non-Repetitive Peak Reverse Voltage (Non-Repetitive ≦ 5ms, T_j = 0~125°C)	V_{RSM}	2600	V
Average Forward Current	$I_{F(AV)}$	800	A
Peak One Cycle Surge Forward Current (Non-Repetitive)	I_{FSM}	16000 (50Hz)	A
		17600 (60Hz)	
Junction Temperature Range	T_j	−40~125	°C
Storage Temperature Range	T_{stg}	−40~125	°C
Mounting Force	—	29.4 ± 2.9	kN

ELECTRICAL CHARACTERISTICS

CHARACTERISTIC	SYMBOL	TEST CONDITION		MIN.	MAX.	UNIT
Repetitive Peak Reverse Current	I_{RRM}	V_{RRM} = 2500V, T_j = 125°C		—	150	mA
Peak Forward Voltage	V_{RM}	I_{FM} = 2500A, T_j = 25°C		—	2.0	V
Reverse Recovery Time	t_{rr}	I_F = 800A, di_F/dt = 100A/μs	T_j = 25°C	—	5.0	μs
			T_j = 125°C	—	7.0	
Thermal Resistance (Junction to Fin)	$R_{th(j-f)}$	DC		—	0.025	°C/W

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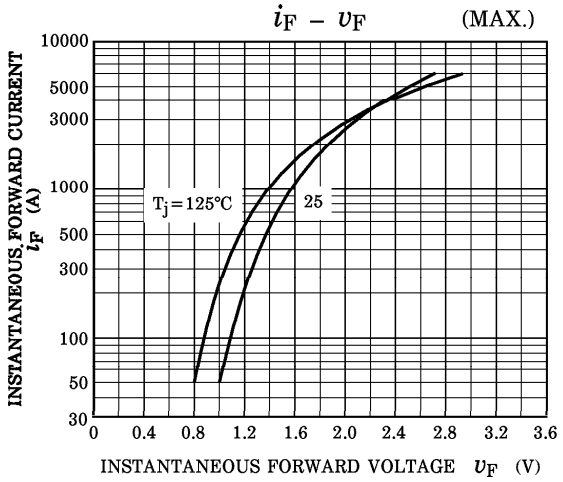
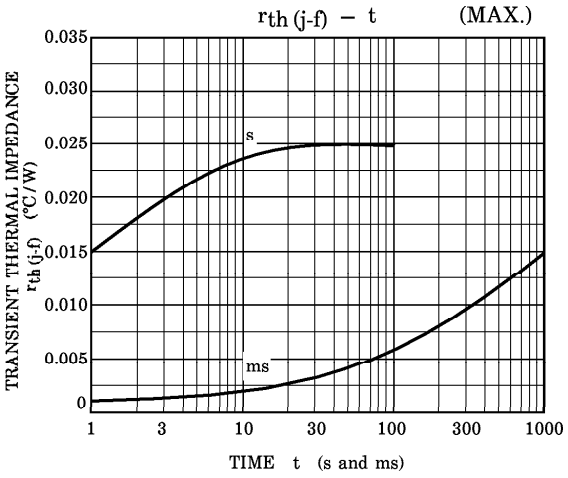
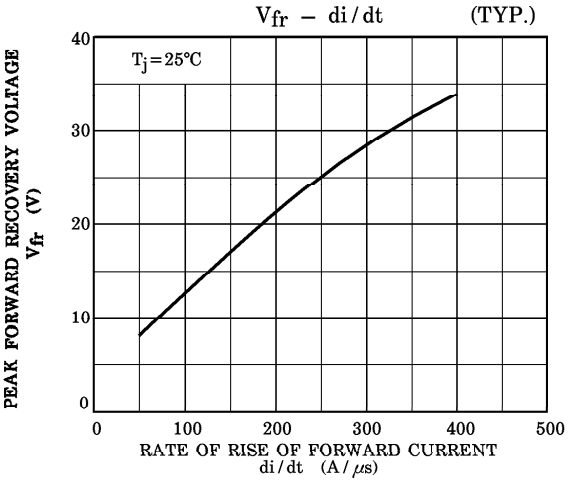
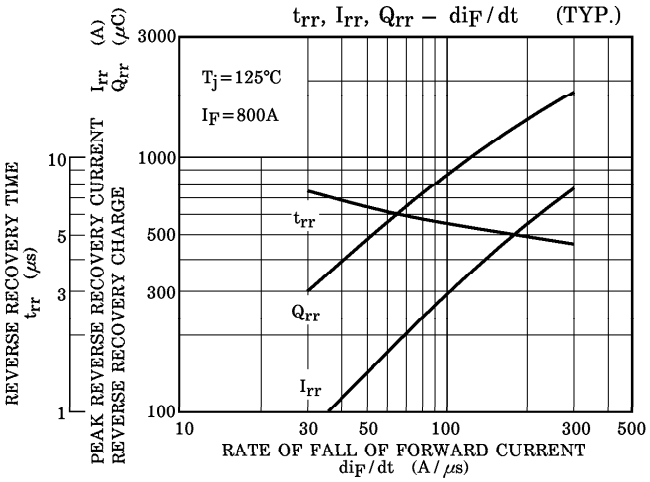

i_F – v_F (MAX.)
INSTANTANEOUS FORWARD CURRENT i_F (A)
10000
5000
3000
1000
500
300
100
50
30
T_j=125°C
25
0
0.4
0.8
1.2
1.6
2.0
2.4
2.8
3.2
3.6
INSTANTANEOUS FORWARD VOLTAGE v_F (V)


r_{th} (j-f) – t (MAX.)
TRANSIENT THERMAL IMPEDANCE r_{th} (j-f) (°C/W)
0.035
0.030
0.025
0.020
0.015
0.010
0.005
0
s
ms
1
3
10
30
100
300
1000
TIME t (s and ms)


V_{fr} – di/dt (TYP.)
PEAK FORWARD RECOVERY VOLTAGE V_{fr} (V)
40
30
20
10
0
T_j=25°C
0
100
200
300
400
500
RATE OF RISE OF FORWARD CURRENT di/dt (A/μs)


t_{rr}, I_{rr}, Q_{rr} – di_F/dt (TYP.)
REVERSE RECOVERY TIME t_{rr} (μs)
PEAK REVERSE RECOVERY CURRENT I_{rr} (A)
REVERSE RECOVERY CHARGE Q_{rr} (μC)
10
5
3
1
3000
1000
500
300
100
T_j=125°C
I_F=800A
t_{rr}
Q_{rr}
I_{rr}
10
30
50
100
300
500
RATE OF FALL OF FORWARD CURRENT di_F/dt (A/μs)